



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,699	02/08/2002	Jingrong Cao	VPI/01-103 US	2092

7590 05/07/2003

Tina Powers
VERTEX PHARMACEUTICALS INC.
130 Waverly Street
Cambridge, MA 02139-4242

EXAMINER

RAO, DEEPAK R

ART UNIT	PAPER NUMBER
----------	--------------


1624

3

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

SM.

Office Action Summary	Application No. 10/071,699	Applicant(s) Cao et al.	
	Examiner Deepak Rao	Art Unit 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply


A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 8, 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-70  are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claims 1-70 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ | 6) <input type="checkbox"/> Other: |

Art Unit: 1624

DETAILED ACTION

Claims 1-70 are pending in this application.

Election/Restriction

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 20-70, 7-9, 16-19 and 1-6 (in part), 10-15 (in part), drawn to compounds of formula I' [or formula I wherein Q is -CO₂-, -C(O)NR⁷- or -S(O)₂NR⁷-] wherein Z¹ is N and Z² is C, corresponding composition and method of use, classified in class 544 and subclass 242+.
- II. Claims 20-31, 41-70, 1-6, and 10-15 (all in part), drawn to compounds of formula I' [or formula I wherein Q is -CO₂-, -C(O)NR⁷- or -S(O)₂NR⁷-] wherein Z¹ is C and Z² is N, corresponding composition and method of use, classified in class 544 and subclass 224+.
- III. Claims 20-31, 41-70, 1-6, and 10-15 (all in part), drawn to compounds of formula I' [or formula I wherein Q is -CO₂-, -C(O)NR⁷- or -S(O)₂NR⁷-] wherein Z¹ and Z² are N, corresponding composition and method of use, classified in class 544 and subclass 182+.
- IV. Claims 20-31, 41-70, 1-6, and 10-15 (all in part), drawn to compounds of formula I' [or formula I wherein Q is -CO₂-, -C(O)NR⁷- or -S(O)₂NR⁷-] wherein Z¹ and Z²

Art Unit: 1624

are C, corresponding composition and method of use, classified in class 546 and subclasses various.

- V. Claims 1-6 and 10-15 (all in part), drawn to a method of use of compounds of formula I wherein Q is other than $-\text{CO}_2-$, $-\text{C}(\text{O})\text{NR}^7-$ or $-\text{S}(\text{O})_2\text{NR}^7-$; Z^1 is N and Z^2 is C, classified in class 514, subclasses various.
- VI. Claims 1-6 and 10-15 (all in part), drawn to a method of use of compounds of formula I wherein Q is other than $-\text{CO}_2-$, $-\text{C}(\text{O})\text{NR}^7-$ or $-\text{S}(\text{O})_2\text{NR}^7-$; Z^1 is C and Z^2 is N, classified in class 514, subclasses various.
- VII. Claims 1-6 and 10-15 (all in part), drawn to a method of use of compounds of formula I wherein Q is other than $-\text{CO}_2-$, $-\text{C}(\text{O})\text{NR}^7-$ or $-\text{S}(\text{O})_2\text{NR}^7-$; Z^1 and Z^2 are N, classified in class 514, subclasses various.
- VIII. Claims 1-6 and 10-15 (all in part), drawn to a method of use of compounds of formula I wherein Q is other than $-\text{CO}_2-$, $-\text{C}(\text{O})\text{NR}^7-$ or $-\text{S}(\text{O})_2\text{NR}^7-$; Z^1 and Z^2 are C, classified in class 514, subclasses various.

The inventions are distinct, each from the other because of the following reasons:

Groups I-IV are drawn to structurally dissimilar compounds. They are made independently and used independently. They would be expected to raise different issues of patentability if a compound of Group I, consisting of pyrimidinyl compounds were anticipated, the anticipatory reference would not necessarily render obvious the compounds of Groups II-IV or vice-versa. They are not art recognized equivalents, they are classified separately and require

Art Unit: 1624

separate searches in the literature. Also inventions of Groups V-VIII are drawn to methods of use of structurally dissimilar compounds.

Inventions I-IV and V-VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions and/or effects and involve structurally different compounds.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Claims 1-70 are generic to a plurality of disclosed patentably distinct species comprising the species disclosed in the specification. In addition to the election of a single invention from above, applicant is required under 35 U.S.C. 121 to **elect a single disclosed species falling within the elected group**, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: 1624

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

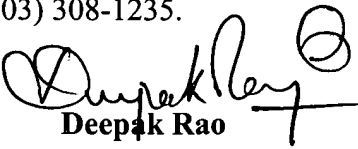
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deepak Rao whose telephone number is (703) 305-1879. The examiner can normally be reached on Tuesday-Friday from 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Mukund Shah, can be reached on (703) 308-4716. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.


Deepak Rao
Primary Examiner
Art Unit 1624

May 5, 2003